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Domesticating the Monster – The Case of Uber in a Social Contract Perspective

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Abstract

Uber is just one of the many platform companies growing up currently, but it is certainly one of the most prominent ones and one of the most discussed examples. Uber has created a great deal of antagonism and labor market conflicts around the world. The reason is that Uber-orchestrated services directly substitute for existing taxi business models and regulations and they undermine existing social arrangements including labor rights and tax payments.

The approach taken in the paper is concerned with social contracting. Social contracting and theories on social contracts have been known for long, but there is also a new social contract theory discussion on how to deal with labor markets where there is an increasing degree of seemingly ‘independent contractors’. This is a development which has many societal roots among them being that ICT platforms reduce transaction costs between individual agents in markets and thus facilitate a larger degree of individualized ‘economic agents’ (laborers) in markets. This poses great challenges and even threats to existing labor relations and regulations. The contribution of the paper is to make a first attempt at grounding the discussion of these challenges and threats in a social contract perspective.

Keywords: Social Contract Theories, ICT platforms, Transaction costs.

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1 Introduction

The rise of ICT platforms such as Uber offers opportunities for cities, but it also brings forward new questions about the social problems that arise from their activities. As societies evolve in terms of technological innovation, so must social contracts between citizens and governments. This paper addresses the social problems that stem from platform businesses. Different areas where Uber disrupts/affects social structures are presented and analysed in a social contract theory perspective. Social contracts provide frameworks for how people and governments interact. The paper describes current cases and discusses the extent to which the Uber platform will have positive influences on smart city developments and/or to what extent it will cause serious social problems.

Presently, arguments in favour of Uber are mainly the creation of new jobs, cheaper transportation, better utilisation of assets, and reductions in car ownership. The primary arguments against Uber are that Uber unfairly competes with traditional taxi driving and thereby undermines regulations and employment rights such as minimum, holiday payment and Employer insurance contributions. Uber driving, furthermore, increases the tax evasion.

Even though cities are well aware of the social problems, some have been able to start finding a trade-off between platform businesses and existing laws. Cities like Boston, Columbus and San Francisco in the US have passed new regulations in order to protect workers' rights, on the one hand, and to create an environment for platform innovation, on the other. Using data from Uber, municipalities will have possibilities to better manage urban growth, improve traffic flows and congestion problems, expand public transportation, and reduce greenhouse gas emissions.

In general, the relationships between Uber and various municipalities often remain unclear. It has become apparent that platforms have created fundamental changes in the social systems and structures, but it is still unclear how new legislation will support new social contracts. The question, whether platform companies are bringing more social opportunities and how their activities disrupt social contracts between employers and employees, is still hotly debated. It seems that municipalities have not yet found ways to deal with the fundamental changes within the cities.

2 Internet-Based Platforms

The general primary function of the plethora of Internet-based platforms is to lower transaction costs of exchanges between the providers and the users of goods, services or activities (Henten & Windekilde, 2016). Transaction

costs were first ‘discovered’ by Ronald Coase (1937) and has during the past 25–30 years attracted more and more attention in the business literature (e.g. Williamson, 2000). The platforms do not offer the services themselves; they act as brokering intermediaries between providers and users. This can be seen in a widely growing number of areas, and innovators and entrepreneurs every day come up with new ideas for exploiting the platform business model.

Brokers and brokering of all kinds have existed for centuries, but the new thing is the technological basis for developing and offering brokering services. Real estate agents have been brokering between sellers and buyers of physical properties for long; vacation residences are rented through agencies; and, taxi dispatch services can be independent entities servicing different taxi companies. From that point of view, there is nothing much new about Internet-based platforms. The new thing is the easily accessible Internet, the many users of Internet (fixed and especially mobile), the relative ease of developing apps for organizing mobile brokering services, and the international dimension that Internet has added.

The ease of finding and using Internet-based platforms has enhanced the network effects of such platforms tremendously. The general business model is based on two-sided markets (or multi-sided platforms), which coordinate the demands of distinct groups of customers, who are dependent on each other (Hagiu and Wright, 2015). There are cross-side network effects between two or more groups of customers of platforms so that the growth of one group of customers will enhance the utility of other groups of customers and, therefore, potentially will lead to more customers on the other sides too.

The Internet and the relative ease of searching for information and buying goods or services online and, therefore, for lowered transaction costs has led to an onslaught of different versions of the platform business models in various areas and of different kinds. Uber is one of the absolutely most prominent cases. It has spread quickly all over the world. This has created a great deal of disturbance in many countries as the business model of Uber clearly disrupts the existing taxi business models. Uber is a very good example of the kind of disruption that Clayton Christensen analyses in his work on disruptive innovations (Christensen, 1997). The reason for Uber disrupting the taxi business is that the Uber platform competes directly with existing taxi services. In some cases, new technology solutions and business models primarily complement existing solutions and business models. In other cases, there is a greater degree of substitution. In the case of Uber, the substitution effect is strong, and this is the reason for the great disturbance that Uber has created around the world.

3 Issues Raised by Uber Activities

The activities of Uber in the ride-hailing field raise a number of issues that have created a great deal of antagonism. If differentiating between ride-sharing and ride-hailing, the transportation services organized by Uber are basically ride-hailing. Ride-hailing means that a vehicle is hired for transportation, while ride-sharing means that persons share the expenses of a journey. The borderline may now and then be blurry. However, with the kinds of services that Uber provides in the area, it is clearly a case of ride-hailing equaling what is commonly called taxi driving.

The issues raised by the Uber-organized ride-hailing services can be divided into, at least, four categories:

- Protection of users
- Labor rights
- Protection of traditional taxi companies
- Tax payment

In the category of protection of users, at least three different areas are relevant: Security, general consumer protection, and privacy. Labor rights are concerned with the general labor conditions as well as wages. Protection of traditional taxi companies is related to the limitations on the number of taxi cabs. And, tax payment deals with taxing of Uber itself as well as the drivers.

The security of the users relates to the quality of vehicles used for the ride-hailing services, including how secure the vehicles are in case of accidents. It also relates to the quality of the educational level of the drivers based on the requirements for professional driving. It, furthermore, relates to the protection against physical and other abuse by drivers.

General consumer protection is concerned with the protection of users against poor services and excessive rates and the possibilities for users to complain in such cases. Furthermore, privacy has to do with the protection of users against misuse of the data created in connection with the ride-hailing service.

Labor rights relate to two areas: general labor conditions and wages. While the protection of users most often is inscribed in public laws and regulations – but also can be part of different kinds of soft-law and self-regulation arrangements – the protection of labor rights are often part of labor agreements between employers and employees, though they may also be regulated by laws and regulations.

The general labor conditions are concerned, e.g., with work hours and the work environment in general. Moreover, wages have to do with the payment

of the drivers for their services. If it's a relationship between an employer and an employee, the salary will be negotiated individually or collectively – if trade unions have the power to impose labor agreements. In the case of Uber, the drivers are not employees of Uber and there is no guarantee of a minimum wage. In the case of traditional taxi driving, the drivers can be employees of taxi companies but they can also be self-employed. Generally, the wages earned by the taxi drivers will at any rate be dependent of how much money they are able to earn on their driving.

The third category is concerned with the protection of taxi companies against too many taxis on the streets and, therefore, too much competition. This issue relates to the owners of the taxi companies as well as the drivers. The history of ride-hailing has in many countries been that, at a point in time in the early days of car driving, people started offering transportation services. This led to a large amount of ride-hailing and sharp competition among service providers resulting in price competition and lowering of earnings of drivers and the quality of the vehicles. In order to stop this kind of destructive competition, local authorities backed by law initiatives have often implemented a licensing system limiting the number of taxis and setting minimum requirements for the quality of the services provided.

This will be in the interest of the drivers – at least those that keep their employment – but it is also very much in the interest of the taxi companies with a taxi license. As there often are rules for rates and service quality, a kind of cartel is created leading to monopoly-like conditions with no competition on price and services. The taxi companies with a license – and their drivers – have an interest in limiting the number of taxi companies and taxis and are in many cases involved in suggesting to city authorities how many taxi cabs should be allowed for the coming period of time.

The last category is concerned with tax payments. As the earnings of drivers are not wages, which are reported by an employing company, and as many drivers may not be setting up their individual business company reporting to the tax authorities, there are problems with the tax payments of drivers. Also, there are problems with tax payments by Uber itself. As with many other transnational companies, the earnings of Uber will be reported elsewhere than in the countries where the money is made.

As can be seen from these issues, Uber is certainly a disruptive force. It is not the intention here to discuss the actual quality of the services offered by Uber drivers, nor whether the drivers could make more or less money than traditional taxi drivers. We only want to look at the fact that Uber, at any rate, disrupts the whole taxi market. There are not the same rules neither with respect

to the protection of users nor of the drivers. They do not acquire a license to offer drive-hailing services and, therefore, constitute a heavy pressure on the combined interests of the taxi company owners and the employees of such companies.

Around the world this has resulted in a number of cases where Uber-driving has been subject to large protests by taxi companies and their employees and Uber-driving has also been outlawed in some countries. Drivers of Uber cars have been taken to court and sentenced and the Uber-company itself is also taken to court and has been forbidden in some places.

In the following parts of this paper, we examine the cases where a different strategy is used. Instead of or based on the threat of outlawing Uber, local authorities including city authorities enter agreements with Uber based on conditions for the provision of services. This is an exercise that could be called ‘domestication of the monster’ but could also be called social contracting.

4 Uber Case

Uber was founded by Travis Kalanick and Garrett Camp in 2009 as an app to request premium black cars in San Francisco. Since then, Uber has launched several new initiatives including a carpooling solution for private car owners, assistance for disabled individuals and senior citizens, sharing-a-cab services, on demand delivery services, and helicopter services and water-taxi services.

Since 2015, Uber has entered various partnerships with small local public transportation agencies to replace portions of public transportation services. And, activities have not stopped there. Uber has decided to support municipalities in achieving their transportation and planning goals.

Many local authorities have recognized that data from the Uber platform can help cities address problems with traffic congestion, insufficient transportation choices, lack of resources, pollution, etc. by allowing access to and use of Uber’s data. Even though Uber has faced criticism from municipalities, there are increasing numbers of projects where Uber plays an important role in improving city life by promoting innovation.

In the following, examples of regulations by cities and current initiatives by Uber, which support local authorities, are highlighted. Focus is on:

1. Ride-hailing regulations
2. Sharing data initiatives with municipal partners
3. Uber as a part of public transportation services – partnership with small local public transportation agencies

4.1 Ride-Hailing Regulations – Protection of Traditional Taxi Companies and Users and Labor Rights

Uber activities are triggering different types of legal questions with regards to safety concerns, labor rights, licensing, taxes, etc. (e.g. Rogers, 2015; Rahman, 2016; Azevedo and Maciejewski, 2015). Ride-hailing companies' expansions are being observed and addressed in many cities around the world by local authorities. In September 2016, CNBC announced that "34 U.S. states and more than 69 cities have passed legislation governing ride-hailing companies, also known as transportation network companies (TNCs). Another six states have enacted legislation mandating minimum insurance requirements".¹

4.1.1 Colorado

In 2014, Colorado passed the first law in the US regulating Lyft's and Uber's ride-hailing services. The companies are classified as transportation network companies, separate from taxis and limos.

The law requires all ride-hailing companies to carry \$1 million commercial liability insurance covering drivers and passengers from the time a driver accepts a call until the time a ride ends. Moreover, drivers are obligated to carry personal car insurance, in addition to the commercial insurance that Uber and Lyft provide – with maximum payouts of up to \$100,000 per incident. To obtain permits, the companies must have drivers pass criminal background and driving history checks. The drivers' cars must pass vehicle inspections, and be clearly marked as TNC cars.

4.1.2 Montgomery County Council

The Montgomery County Council passed bills aimed to improve taxi service.² One bill imposes a charge of up to 25 cents on every Uber trip (also other ride-hailing services). With the revenue from this surcharge, the county will create a Transportation Services Improvement Fund. It will use the fund to improve the delivery of accessible taxicab services to eligible senior citizens and disabled people.³ The Council aims to have 100 percent wheelchair-accessible taxis with lifts or ramps by 2025.

¹<http://www.cnbc.com/2016/09/02/uber-and-lyft-are-getting-pushback-from-municipalities-all-over-the-us.html>

²http://wamu.org/news/15/06/08/taxi_regulations_e_hail_app_targeted_by_montgomery_county_council_today

³Memorandum, Montgomery County Council, July 20, 2015, https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/bill/2015/Packets/20150721_4B.pdf

The other bill will create a framework for taxi service improvement. The bill will create a centralized dispatch system for county cabs.

4.1.3 Michigan

In 2016, the new regulations put taxis and transportation network companies like Uber and Lyft on the same regulatory scheme as taxis. Under the bills, both would be regulated by the state. Taxi and transportation network companies would be required to register annually with the state and pay a per-vehicle fee. The bills require background checks and vehicle inspections for all ride services and will allow only drivers who are at least 19 years old. The package also requires airports, including Detroit Metropolitan Airport, to allow all the ride-hailing services to pick up and drop off fares at the airport.⁴

4.2 Sharing Data with Municipalities

4.2.1 Boston, Massachusetts

The deal with Massachusetts is an example of a tradeoff agreement, which on the one hand officially recognizes Uber and other ride-hailing services as official modes of transportation, and on the other hand gets Uber to share its data with the municipalities. The sharing of data agreement came a few weeks after the state of Massachusetts drafted regulations that permit ride-hailing services in general. According to the agreement, Uber will give municipalities a quarterly report with trip logs showing the date and time each ride began and ended, the distance traveled and the zip codes where people were picked up and dropped off. None of the data will contain the names of passengers or their specific locations.

This initiative represents an example of cooperation between city councils and platform companies. The goal of this agreement is not only to lower traffic congestion, expand public transportation, and reduce greenhouse gas emissions, but also to eliminate social problems related to Uber activities.

Boston authorities have recognized that the Uber platform can bring innovation but also cause problems to users of the services and the heavily regulated taxis companies. Therefore, the House and Senate passed bills aimed to improve taxi services by imposing a two-tiered background check on drivers and by instituting a 20 cent per ride tax. The fee, which will be eliminated after 10 years, will go to municipal and state transportation infrastructure and

⁴<http://www.detroitnews.com/story/news/local/michigan/2016/12/01/uber-regulations/94744106/>

to a fund, handling job training and innovation for taxi and delivery services.⁵ Five cents from the fee will go to a fund to help taxi drivers who have been hurt by competition from the app-based ride services⁶; 10 cents from each ride will go to cities and towns to pay for transportation needs, and 5 cents will go to the state's transportation fund. The taxi-assistance fee will stay in effect until 2022, and the broader agreement will disappear in 2027.

Some politicians claim that the 20 cent per ride surcharge fee was a political compromise designed to provide some small compensation to the taxi industry. Others are of the opinion that this bill expands consumer choice and encourages innovation within the city.

Uber believes that its data can help cities with traffic planning, congestion reduction, identification of zoning changes and needs, reduction of parking, facilitation of additional transportation solutions for marquee city initiatives, etc.⁷

4.2.2 Columbus

In June 2016, the city of Columbus' Smart Columbus project won the Smart City Challenge after competing against 77 US cities nationwide. Collaboration between Columbus and local partners, including Uber, helped the city win this competition. Due to new regulations, the city of Columbus is the first US city to fully integrate innovative technologies into their transportation network. The main city goal is declared to be to advance mobility by adopting a robust complete street policy and fully embracing the sharing economy. The plan is to increase ride-hailing and car-sharing services in the city. According to the Smart Columbus project, residents will be able to put money on a Smart Pass and use it to pay for every transit option, from ride-hailing programs like Uber to public transportation options. Uber role is defined as Technology Vendor and Service Provider.

4.3 Uber as a Part of Public Transportation Services – Partnership with Small Local Public Transportation Agencies

Uber has entered various partnerships with small local public transportation agencies, for example in Miami-Dade County, Pinellas Park, Florida, Altamonte Springs, Centennial, and Colorado.

⁵http://www.masslive.com/politics/index.ssf/2016/08/gov_charlie_baker_signs_law_regulating_uber_and_lyft_in_massachusetts.html

⁶<http://www.boston.com/news/business/2016/08/01/new-law-require-uber-pay-5-cents-every-ride-taxi-industry>

⁷<https://www.uber.com/en-DK/helping-cities/>

The main reason for those services is that municipalities are pressed by tight budgets. In some cities, Uber's services are implemented as substitution services where local authorities are cutting transit lines and subsidizing car rides (Miami-Dade County, Pinellas Park, Florida). Other cities are seeing Uber activities as a complement to public transport (Columbus).

5 Perspective

At the heart of many governmental discussions is the issue of the transformation of social contracts, particularly with regards to the changing nature of employment, labor rights, protection of citizens, and tax and income. The effects of globalization and technological change are significant and old models of social contracts are eroding. The challenge for new social contracts is to determine how best to support society and business in a new 'platform world'. The initiatives mentioned above are but small examples of public authorities attempting to deal with the challenges and potentials that new technologies and business models pose. Whether their social contracting initiatives will be successful can be seen in the coming years, but they constitute attempts on different scales to build new social contracts.

The modern theories on social contracting can be found in the works by Rawls, Freeman, Donaldson and Dunfee and many other researchers.

Rawls' theory of justice is one of the most famous of the modern contract theories. In his book "A Theory of Justice" (Rawls, 1999), he presented the main idea of justice as fairness, a theory of justice that generalizes and carries to a higher level of abstraction the traditional conception of the social contract. He wrote that "*Justice is the first virtue of social institutions, as truth is of systems of thought. A theory however elegant and economical must be rejected or revised if it is untrue; likewise laws and institutions no matter how efficient and well-arranged must be reformed or abolished if they are unjust*". He discussed in detail equal liberty, distributive justice, duties and obligations and the concept of a well-ordered society as well as how the theory of justice would affect institutions.

Donaldson and Dunfee (1995) in their work focus on business ethics. In their Integrative Social Contract theory, they claim that rational humans would agree to a hypothetical social contract allowing self-selected economic communities to set their own norms of ethical behaviour through means that they choose. Their theory attempts to recognize moral diversity present in

economic communities. As a result, this theory accommodates that different ethical precepts are appropriate for different industries, companies and professions.

A growing numbers of writers have recognized that the activities of companies impact upon the external environment and they have tried to construct and analyse the social responsibility of corporations from a social contract perspective (Freeman, 1984 and 2004; Donaldson and Dunfee, 1999; Dunham et al., 2006; Sacconi, 2004; Rahman, 2016; Baram, 2016). The concept of social contracting has been used to explain the relationship between companies and society. In this view, social contract theory includes the obligations that businesses of all sizes owe to the communities in which they operate and to the world as a whole. This involves corporate philanthropy, corporate social responsibility and corporate governance (Bradley, n.d.).

The idea of a social contract has also been challenged by a number of writers from a modern perspective of contract law.

Schwartz and Scott (2003) in their paper “Contract Theory and the Limits of Contract Law” look at the contract from a mutual interest perspective. *“Firms contract to maximize expected surplus and the state permits markets to function because markets maximize social welfare. Thus, there is a correspondence of interest between firms and the state, which implies that, when externalities are absent, the state should implement the preferences of firms regarding the rules that regulate their contracting behavior.”*

Lobel (2016) broadened the view of law regarding platforms discussing the perspectives of business models and law. It is argued in the paper “The law of the platform” that the platform economy is presenting not only a paradigm shift for business, but also for legal theory. He refers to the development of the platform economy, and as an effect of platform business models, people are becoming part-time entrepreneurs. He recognizes that new technologies present new opportunities and new challenges for regulation in terms of consumer protection laws, insurance laws, employment and labor laws, and property and zoning laws. In his paper, focus is also on innovation in services, entrepreneurship, and the way people work, which triggers new sets of regulations. He concludes that a continuous search for the optimal balance between innovation and regulation is needed.

The impact of social contracts on rights and obligations in the modern welfare state is a central theme in discussions in many countries. Recently, researchers and politician have addressed specific issues faced by welfare states and the urgent need to reformulate social contracts. Until now, different countries have addressed the matter in different ways.

In the US, the discussion focuses on the employment that emerges through software platforms. As a result of platform business models, a growing number of people are engaging in flexible and freelance work. Due to the fact that independent contractors represent the fastest growing part of the American work force, the legal approach needs to follow the changing dynamics of labor market structures.

Traditional US labor market structures are based on two kinds of employment: Full-time employment and independent contractors. As a consequence, all legal, tax and economic systems are supporting the old formations. The legal distinction between employees and independent contractors has been part of American law since the New Deal programs that were enacted in the U.S. between 1933 and 1938.

Wilma Liebman, a former chairwoman of the National Labor Relations Board and an Adjunct Professor at New York University School of Law, and Groff et al. (2015) have pointed out that a third category of workers need to be established. They suggest that a ‘dependent contractor’ classification can fill the gap. Groff et al. (2015) have addressed the issue related to the use of independent contractors in the growing on-demand economy including the need to modernize labor and employment laws to reflect the nature of new workforces in the 21st century.

The evolution of the social contract theory requires taking into consideration the development of the new platform businesses and a new mode of interaction between platform companies, government and society and the effects on welfare. On the one hand, the welfare benefits for individual participants can potentially be substantial; on the other hand, platform companies are evading payroll taxes, unemployment insurance payments, minimum wage and overtime laws and are, therefore, negatively affecting public welfare. This necessitates discussion and action regarding the enactment of new kinds of social contacts and resulting regulations.

6 Conclusion

Uber is just one of the many platform companies growing up presently, but it is certainly one of the most prominent ones and one of the most discussed examples. Uber has created a great deal of antagonism and labor market conflicts around the world. The reason is that Uber-orchestrated services directly substitute for existing taxi business models and regulations and that they undermine existing social arrangements including rights of consumers, labor rights and tax payments.

The issue that trade unions, taxi-owner organizations as well as local and national state authorities are struggling with these years is how to tackle this new and emerging situation. Manifestations and prohibitions are part of reactions, but there are also reactions attempting to enter into agreements with Uber and other platform companies such as Airbnb. The intension of the paper is not to pass any judgement on whether one or the other or a combination of confrontational activities and negotiations is the right approach. The intension is solely to shed light on the activities primarily taking place in the US to enter into various local negotiations and agreements with Uber.

The reasons, discussed in the paper, for entering into such negotiations and agreements are to start implementing regulations in the ride-hailing area that also encompass initiatives like Uber, to get access to all the data that Uber assembles in order to improve traffic management in cities, and thirdly to explore the possibilities of Uber-like transportation arrangements to become part of the general public transportation systems in cities.

The general approach discussed in the paper is concerned with social contracting. Social contracting and theories on social contracts have existed for long, but there is also a new social contract theory discussion on how to deal with labor markets where there is an increasing degree of 'dependent contractors'. This is a development which has many societal roots, among them the fact that ICT platforms reduce transaction costs between individual agents in markets and thus facilitate a larger degree of individualized 'economic agents' (laborers) in markets. This poses great challenges and even threats to existing labor relations and regulations. The contribution of the paper is to make a first attempt at grounding the discussion of these challenges and threats in a social contract perspective.

References

- [1] Azevedo, F., and Maciejewski, M. (2015). *Social, Economic and Legal Consequences of Uber and Similar Transportation Network Companies (TNCS)*, Policy Department B: Structural and Cohesion Policies, PE, Belgium: European Parliament, 398.
- [2] Baram, M. (2016). *A New Social Contract for Governing Industrial Risk in the Community*. Boston, MA: Boston University School of Law Public Law.
- [3] Bradley, J. (n.d.). *Social Contract Theories in Business*, Available at: <http://smallbusiness.chron.com/social-contract-theories-business-59955.html>

- [4] Brishen, R. (2015). *The Social Costs of Uber*. Chicago, IL: University of Chicago.
- [5] Christensen, C. M. (1997). *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Boston, MA: Harvard Business School Press.
- [6] Coase, R. H. (1937). The nature of the firm, *Economica* 4, 386–405.
- [7] Donaldson, T. and Dunfee, T. (1999). *Ties that Bind: A Social Contracts Approach to Business Ethics*, Boston, MA: Harvard Business School Press.
- [8] Dunham, L., Freeman, R. E. and Liedtka, J. (2006). Enhancing stakeholder practice: A particularized exploration of community. *Bus. Ethics Q.* 16, 23–42.
- [9] Dunfee, T. W. and Donaldson, T. (1995). Integrative social contracts theory – A communitarian conception of economic ethics. *Econ. Philos.* 11, 85–112.
- [10] Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston, MA: Pitman.
- [11] Freeman, R. E. (2004). The stakeholder approach revisited. *Z. Unter.* 5, 228–241.
- [12] Groff, A. L., Callegari, P., and Madden, P. M. (2015). Platforms like Uber and the blurred line between independent contractors and employees: Facing the challenges to employment law presented by seemingly intermediary platforms of the modern on-demand economy. *Comput. Law Rev. Int.* 16, 166–171.
- [13] Hagi, A., and Wright, J. (2015). Multi-sided platforms. *Int. J. Ind. Organ.* 43, 162–174.
- [14] Henten, A. and Windekilde, I. (2016). Transaction costs and the sharing economy, *Info* 18, 1–15.
- [15] Lobel, O. (2016). *The Law of the Platform, Legal Studies Research Paper Series*. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2742380
- [16] Rahman K. S. (2016). *Reinventing the Social Contract*. New York, NY: The Roosevelt Institute.
- [17] Rawls, J. (1999). *A Theory of Justice, Revised Edition*. Cambridge, MA: Harvard University Press.
- [18] Sacconi, L. (2004). *A Social Contract Account for CSR as Extended Model of Corporate Governance (Part I): Rational Bargaining and Justification*. Trento: University of Trento.

- [19] Scott, R. E., and Schwartz, A. (2003). Contract theory and the limits of contract law, New York City, NY: Columbia University.
- [20] Williamson, O. E. (2000). The new institutional economics: Taking stock, looking ahead. *J. Econ. Liter.* 38, 595–613.

Biographies



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Anders Henten is professor at center for Communication, Media and Information technology (CMI), Aalborg University. He is a graduate in communications and international development studies from Roskilde University in Denmark (1989) and holds a Ph.D. from the Technical University of Denmark (1995). His main areas of research are ICT markets, ICT-based business models, information and communication technology innovation, communications policy and regulation, service innovation and internationalisation, socio-economic implications of information and communication technologies. Anders Henten has worked professionally in the area of communications economy and policy for more than 25 years. He has participated in numerous research projects financed e.g. by the European Community, the Nordic Council of Ministers, Danish Research Councils and Ministries, and in consultancies, financed by World Bank, UNCTAD, ITU, Danish Ministries, etc. He has published nationally and internationally – more than 250 academic publications in international journals, books, conference proceedings, etc. He presently holds academic positions as member of the board of directors of the International Telecommunication Society, member of the editorial board of Telecommunications Policy, member of the editorial board of Communications & Strategies.